AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A reaction process, ~~characterised by the step of~~ comprising introducing reaction components to a medium, wherein at least one of the reaction components has a different flow rate from the other reaction component(s) through the medium, so that a moving reaction phase is formed which causes reaction products.

2. **(Currently amended)** ~~A~~ The reaction process as claimed in claim 1 ~~characterised by the~~ further comprising ~~step of~~ separating the reaction products from the medium.

3. **(Currently amended)** ~~A~~ The reaction process as claimed in claim 1 or claim 2 wherein the differences in flow rate through the medium are a consequence of ~~the~~ a molecular weight of at least one reaction component.

4. **(Currently amended)** ~~A~~ The reaction process as claimed in claim 1 or claim 2 wherein the differences in flow rate through the medium are due to electrostatic charge.

5. **(Currently amended)** ~~A~~ The reaction process as claimed in claim 1 or claim 2 wherein the differences in flow rate through the medium are due to ligand interaction.

6. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 5~~ wherein the properties of the medium that provide differing flow rates to the reaction components also leads to separation of the reaction products.

7. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 6~~ wherein the medium includes porous beads.

8. **(Currently amended)** ~~A~~ The reaction process as claimed in claim 7 wherein the beads are made of a ~~crossed~~ cross-linked polymeric material.

9. **(Currently amended)** ~~A~~ The reaction process as claimed in claim 8 wherein the ~~crossed~~ cross-linked polymeric material includes dextran.

10. **(Currently amended)** ~~A~~ The reaction process as claimed in claim 8 wherein the ~~crossed~~ cross-linked polymeric material includes agarose.

11. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 10~~ wherein the moving reaction phase is controlled by altering the properties of the medium.

12. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 10~~ wherein the moving reaction phase is controlled by altering the volumes of the reaction components through ~~the~~ a column.

13. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 10~~ wherein the moving reaction phase is controlled by altering the overall flow rate through ~~the~~ a column.

14. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 13~~ wherein the reaction products are selectively removed from ~~the~~ a reaction zone, preventing them from being involved in subsequent reactions.

15. **(Currently amended)** ~~A~~ The reaction process as claimed in claim 14 wherein the reaction products are selectively removed from the reaction zone due to differences in molecular size between the reaction components and the reaction products.

16. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 15~~ wherein ~~the~~ properties of the medium are selected to substantially prevent particular reaction products from forming.

17. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim ~~1 to~~ 16 wherein the properties of the medium are selected to orient the reaction components to provide selectivity of an active site in reactions where multiple active sites exist.

18. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim ~~1 to~~ 17 wherein ~~an~~ said active site is protected through the use of protection chemistry to selectively produce a particular reaction product.

19. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 18~~ wherein the reaction process is used for glycosylation reactions.

20. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 18~~ wherein the reaction process is used for polymerisation.

21. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 18~~ wherein the reaction process is used for cleavage reactions.

22. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 18~~ wherein the reaction process is used for protein PEGylation.

23. **(Currently amended)** ~~A~~ The reaction process as claimed in ~~any one of claims~~ claim 1 ~~to 22~~ wherein the reaction process is controlled using size-exclusion reaction chromatography ~~chromatology~~.

24. **(Currently amended)** A method of protein PEGylation, ~~characterised by the step of~~ comprising forming a moving reaction phase using a reaction process as claimed in claim ~~any one of claims~~ 1 ~~to 18~~.

25. **(Currently amended)** Reaction products produced by the reaction process of claim ~~any one of claims~~ 1 ~~to 23~~.

26. **(Currently amended)** The reaction ~~Reaction~~ products as claimed in claim 25 wherein the products are PEGylated protein.

27. **Canceled**

28. **(Currently amended)** A kitset to bring two or more reaction components together, ~~including~~ comprising

at least two reaction components, and

a medium, ~~characterised in that~~

wherein at least one of the reaction components has a different flow rate from the other reaction component(s) through the medium, so that a moving reaction phase is formed, which produces reaction products.

29. **(Currently amended)** A kitset for use in a reaction process as claimed in claim ~~any one of claims~~ 1 ~~to 23~~, ~~including~~ comprising

unit volumes of at least two reaction components,

a medium,

instructions and

means for bringing two or more reaction components together in a moving reaction phase.

30. **Canceled**

31. **Canceled**

32. **Canceled**